

Presentation:

Public Private Partnerships: Managing Risk—Maximizing Value

By: Steve Davidson, PE

Purdue Road School

March 7, 2012

The background of the slide features a stylized graphic of a globe with white lines representing global connectivity or infrastructure. The globe is set against a blue sky with white clouds. The Parsons logo is prominently displayed in the bottom left corner.

PARSONS

Managing Risk—Maximizing Value

Meeting Today's Changing and Challenging Economic Times

Reduced Gas Tax Revenue

Aging Infrastructure

No Transportation Bill



How do States meet transportation needs with limited funding?

What is a Public Private Partnership (PPP)?

Functions

- Develop
- Finance
- Operate

Infrastructure

- Transportation
- Utilities
- Buildings

Tools

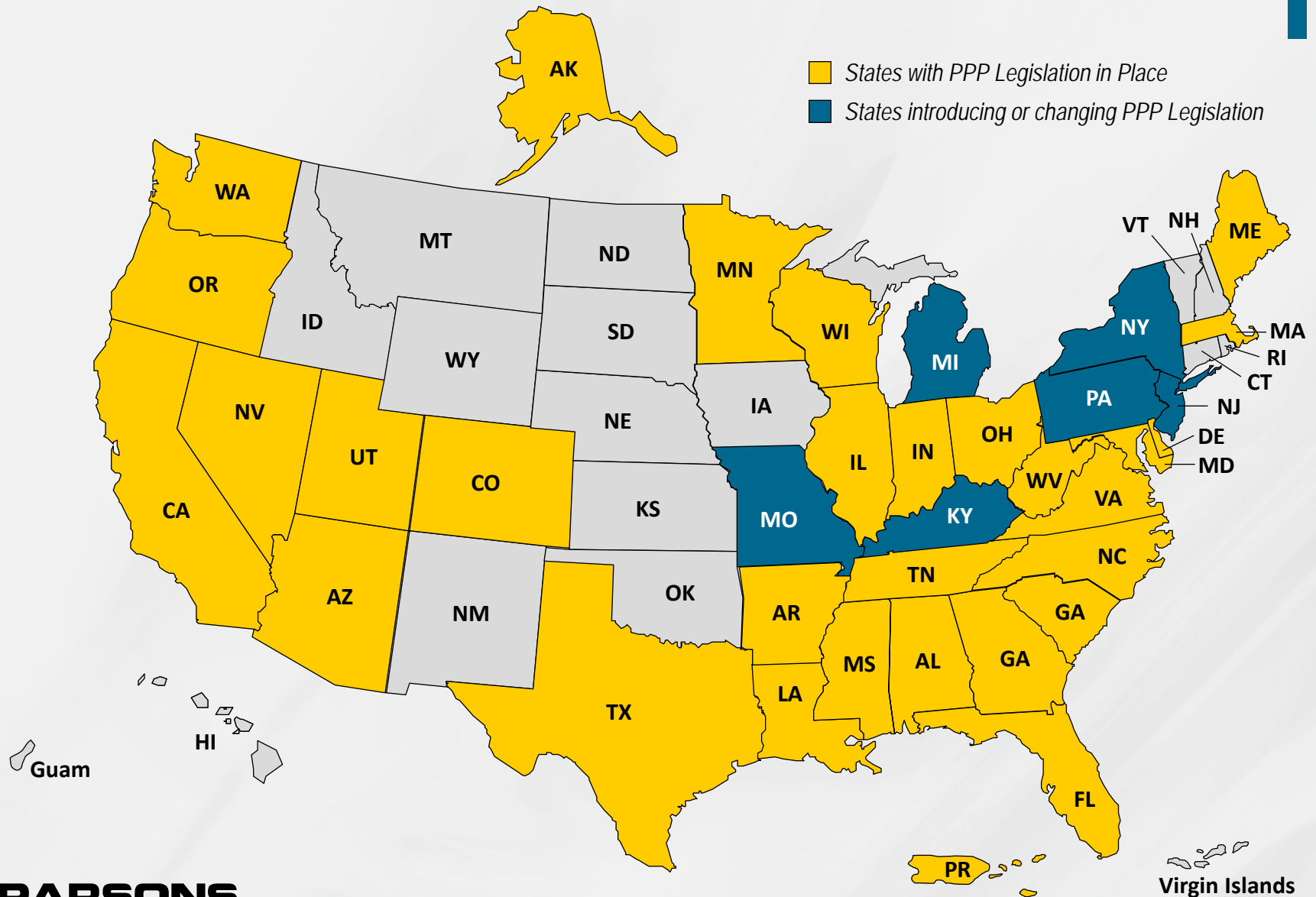
- Tax-Advantaged Bonds
- Public Funding
- Private Equity Funds



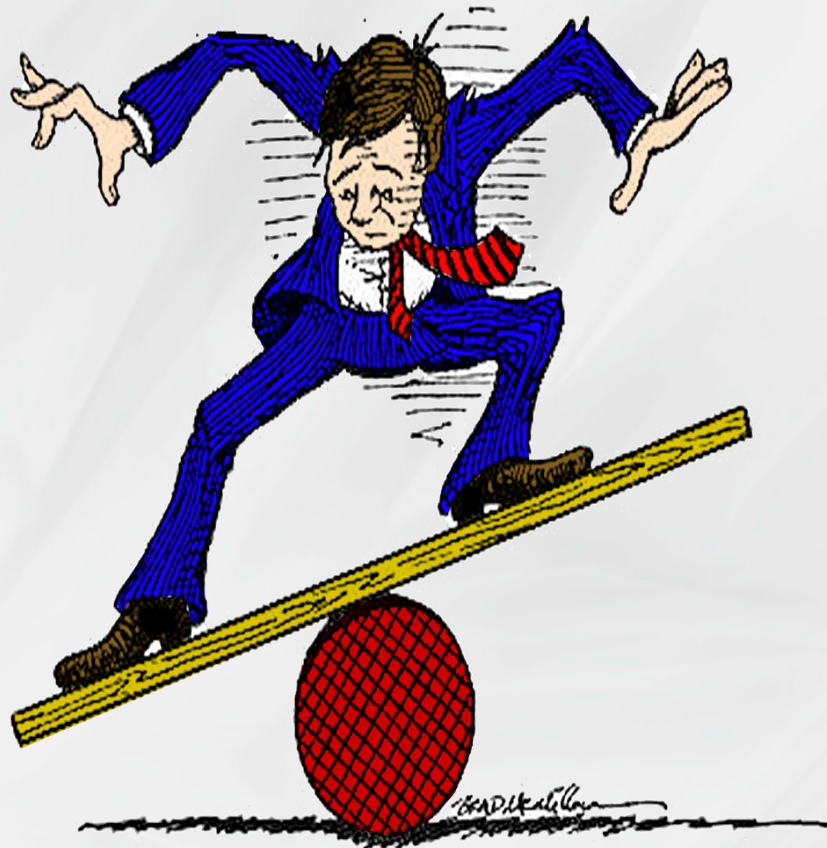
- » Public need is fulfilled, but financed and operated through private interests.
- » Public retains ownership and some control to ensure public interests are met.

Graphic Source: www.consultr.co.uk

Where is this Working? Current Trends....



Is there RISK in a PPP arrangement ?



Types of Risks on PPP Projects

Design Construction Political
Operating
Market/Revenue
DUE DILIGENCE IS KEY!!!
Legal* Land/ROW acquisition Environmental*
Force Majeure*

Public and private parties accept the risk elements of the infrastructure development that they are best able to control and mitigate.

Private Sector

Government



*Shared Risk

Source: Survey of P3 Legislation Across the United States; Michael Pickiel and Lillian Plata
Graphic Source: www.canstockphoto.com

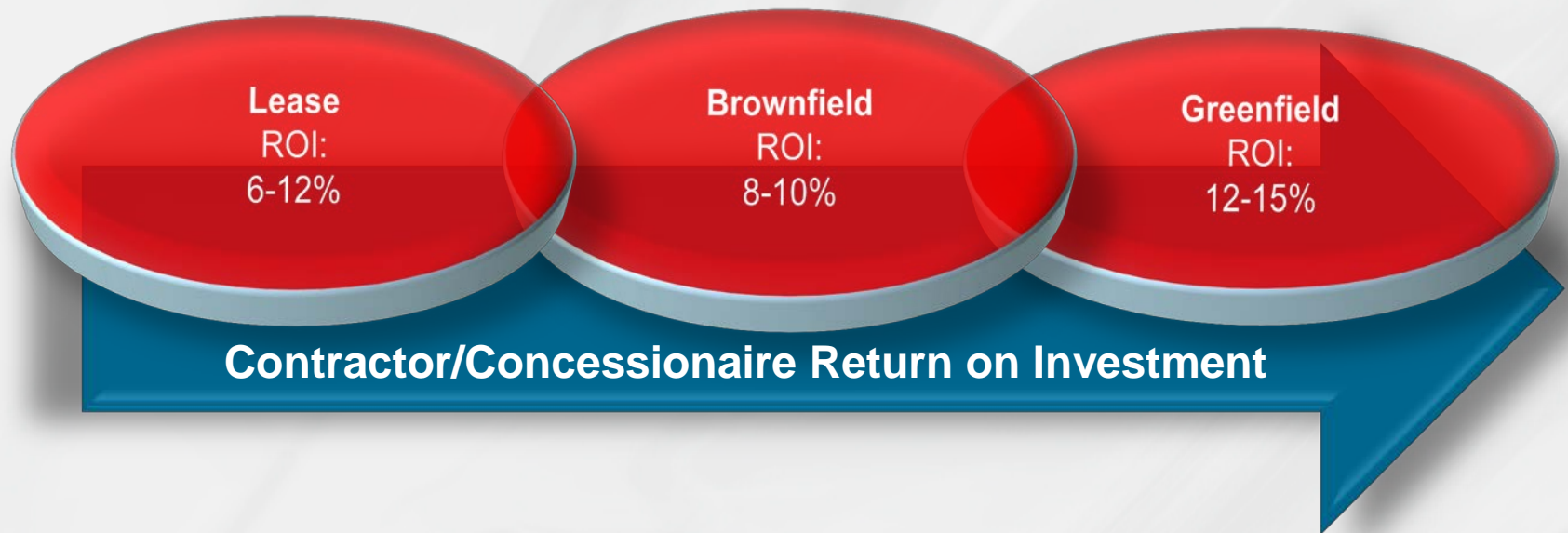
Risk Allocation: Varies by Project Type

- Traditional Approach
 - Public agency assumes majority of the risks
- Concession Approach
 - Concessionaire assumes most of the construction, toll, revenue and operating risk
 - Force majeure, legal, and environmental risk is usually shared
- PPPs Shift Risk
 - Major risk categories: construction, traffic & revenue, operating, force majeure, legal and environmental

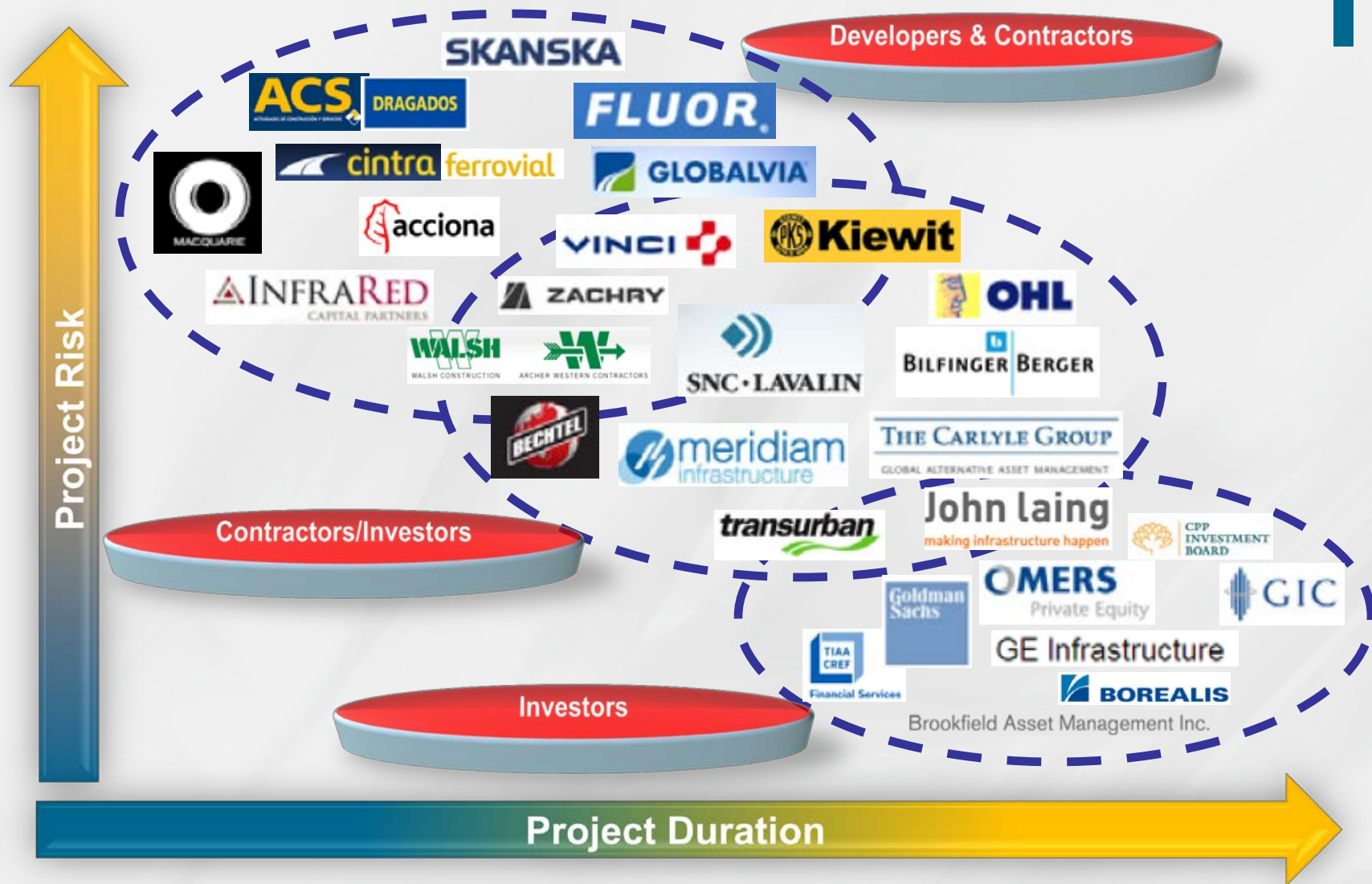


Return on Investment – By Project Type

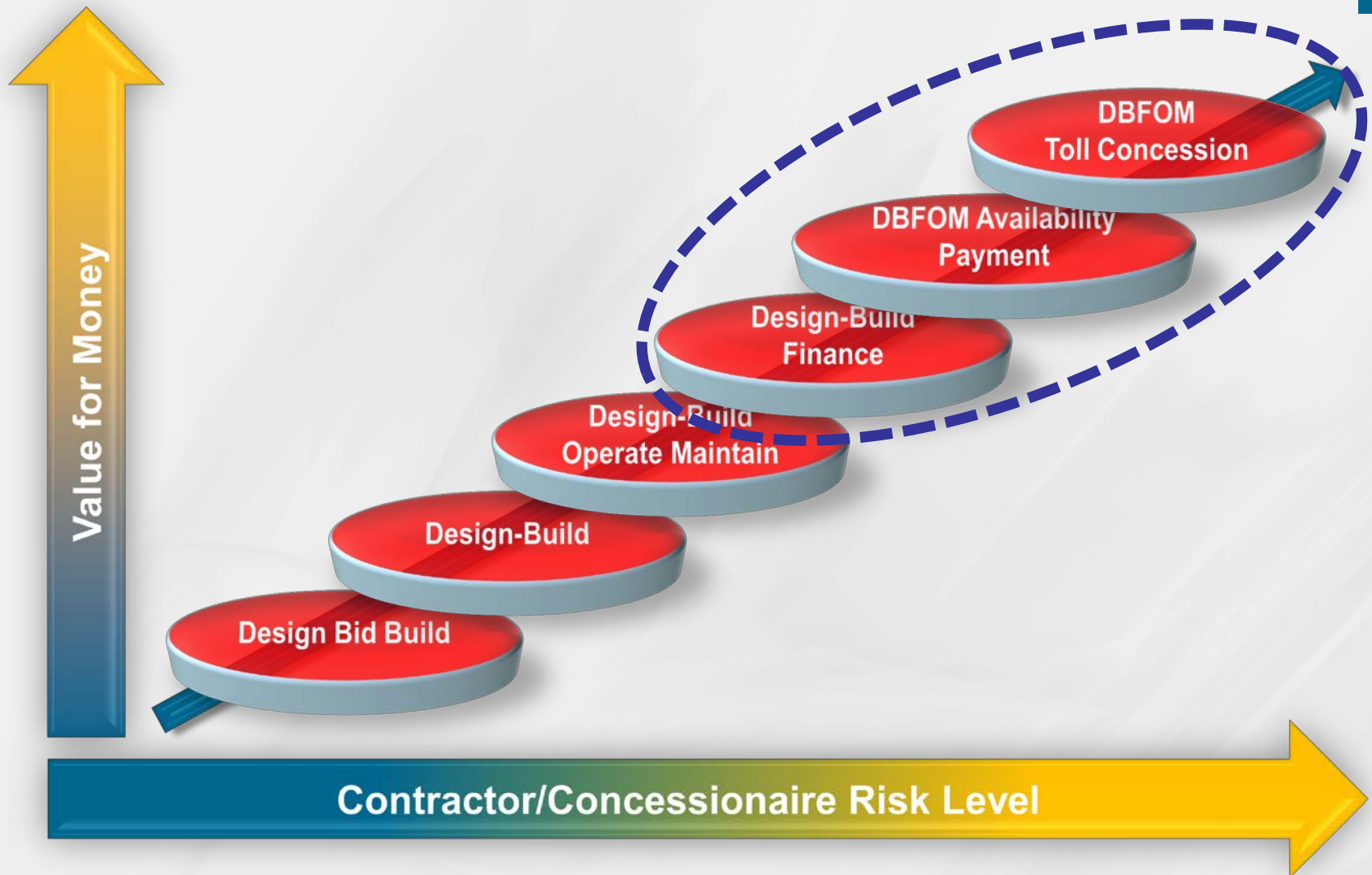
- Investors are comfortable with varying Returns
 - Investment banks/Pension Funds (More stable)
 - Contractors and Developers (More aggressive)
- All investors are looking for a return on investment
 - Varies based on Project Type, Delivery Option, and Project Status



Who's Investing and When



What are PPP Delivery Options?



Delivery Options – Varying Risk Profile

Design – Build – Finance

- **Financing:** Contractor
- **Contract Term:** 5 to 7 years
- **Risk Distribution:**

Contractor	Public Agency
Design	Revenue
Construction	O&M

- Milestone Payments based on:
 - **Facility Availability:** limiting lane (highway) and station (transit) closures
 - **Quality:** Pavement conditions, service frequency, etc.
 - **Safety:** Reduction in accident rates
- Contract can also include acceptance payments for early completion
- Public Agency typically provides ROW and NEPA clearance.

Delivery Options – Varying Risk Profile

Design-Build-Finance-Operate-Maintain: Availability Payment

- **Financing:** Private sector firm
- **Contract Term:** 25 to 45 years

Contractor	Public Agency
Design	Revenue (Tolling)
Construction	
O&M	

- Availability Payments based on meeting performance standards related to:
 - **Facility Availability:** limiting lane (highway) and station (transit) closures
 - **Quality:** Pavement conditions, service frequency, etc.
 - **Safety:** Reduction in accident rates
 - **Volume Payment:** AADT or transit ridership
- Contract can also include acceptance payments for early completion
- Public Agency typically provides ROW and NEPA clearance.

Delivery Options – Varying Risk Profile

Design-Build-Finance-Operate-Maintain: Toll Concession

- **Financing:** Private sector
- **Contract Term:** 50 to 99 years

Contractor	Public Agency
Design	Toll Rates
Construction	Audits
Revenue	Revenue Sharing
O&M	

- Toll rates are usually set and cannot be raised without approval
- Penalties can be assessed:
 - **Facility Availability:** limiting lane (highway) and station (transit) closures
 - **Quality:** Pavement conditions, service frequency, etc.
 - **Safety:** Reduction in accident rates
- Hand back requirements
- Public Agency typically provides ROW and NEPA clearance.

Maximizing Value with PPPs

iROX - I-75 Expansion, Florida

Project Data	iROX I-75 Expansion
Project Type	Freeway Reconstruction (Added Lanes 4 to 6)
Project Length	30 miles
Total Project Financing	\$430.5M
PPP Procurement Method (Time)	Design-Build-Finance (6 years)
Maximum Payment	\$82M per year
Value Added by PPP	Schedule/User Costs
Year Deal Closed	2007

Maximizing Value with PPPs

I-595 Express, Florida

Project Data	I-595 Express
Project Type	Freeway Reconstruction (Added Reversible HOT Lanes)
Project Length	10.5 miles
Total Project Financing	\$1.8B
PPP Procurement Method (Time)	Availability Payment (35 yr)
Public Subsidy	\$690M
Maximum Availability Payment	\$64M per year
Actual Availability Payment	\$61M per year
Value Added by PPP	\$105M
Year Deal Closed	2009

Maximizing Value with PPPs

North Tarrant Expressway, Texas

Project Data	North Tarrant Expressway
Project Type	Freeway Reconstruction (Added Toll Lanes)
Project Length	13 miles
Total Project Financing	\$2.0B
PPP Procurement Method (Time)	Toll Concession (52 yr)
Estimated Public Subsidy (Pre-PPP)	\$1.30B
Estimated Revenue or Payment	\$700M
Actual Revenue	\$1.43B
Actual Subsidy	\$573M
Value Added by PPP	\$727M
Year Deal Closed	2009

Maximizing Value with PPPs

I-635 LBJ Freeway, Texas

Project Data	I-635 LBJ Freeway
Project Type	Freeway Reconstruction (Added Toll Lanes)
Project Length	13.7 miles
Total Project Financing	\$2.7B
PPP Procurement Method (Time)	Toll Concession (52 yr)
Estimated Public Subsidy (Pre-PPP)	\$900M
Estimated Revenue or Payment	\$1.80B
Actual Revenue	\$2.26B
Actual Subsidy	\$445M
Value Added by PPP	\$455M
Year Deal Closed	2010

Maximizing Value with PPPs

State Highway 121, Texas

Project Data	SH 121
Project Type	New Tolled Highway (Greenfield)
Project Length	28 miles
Total Project Financing	\$3.20B
PPP Procurement Method (Time)	Toll Concession (50 yr)
Estimated Public Subsidy (Pre-PPP)	\$0
Estimated Revenue or Payment	\$1.20B
Actual Revenue or Payment	\$3.20B
Value Added by PPP	\$2.00B
Year Deal Closed	2007

Maximizing Value with PPPs

Chicago Skyway Bridge Lease, Illinois

Project Data	Chicago Skyway
Project Type	Existing Tolled Highway
Project Length	7.8 miles
Total Project Financing	\$1.83B
PPP Procurement Method (Time)	Concession Lease (99 yr)
Estimated Public Subsidy (Pre-PPP)	\$0 (City paid on-going O&M)
Estimated Revenue or Payment	\$500M
Actual Revenue or Payment	\$1.83B
Value Added by PPP	\$1.33B
Year Deal Closed	2007

Maximizing Value with PPPs

Indiana Toll Road Lease, Indiana

Project Data	Indiana Toll Road
Project Type	Existing Tolloed Highway
Project Length	157 miles
Total Project Financing	\$3.85B
PPP Procurement Method (Time)	Concession Lease (75 yr)
Estimated Public Subsidy (Pre-PPP)	\$0 (State paid on-going O&M)
Estimated Revenue or Payment	\$2.80B
Actual Revenue or Payment	\$3.85B
Value Added by PPP	\$1.05B
Year Deal Closed	2006

Major Planned PPP Projects

Estimated Project Cost (\$M)	Project Name	State	Project Sponsor/ Owner	Project Delivery Model
\$1,300	Louisville-Southern Indiana Ohio River Bridges	IN/KY	IFA/INDOT/KYTC/LSIBA	DBFOM with availability payments
\$2,177	Detroit River International Crossing	MI	Michigan DOT/ Transport Canada	DBFOM with either real tolls or availability payments
\$3,000	Ohio Turnpike Lease	OH	ODOT/OTP	Lease + OM
\$1,680	Midtown Tunnel/ Downtown Tunnel/ MLK Extension	VA	Virginia DOT	DBFOM
\$1,500 to \$2,000	U.S. 400 Improvements	VA	Virginia DOT	DBFOM
\$3,900	I-35E Dallas	TX	Texas DOT	DBFOM
\$2,000	Illiana Expressway	IL/IN	Illinois DOT/Indiana DOT	DBFOM
\$1,000	Goethals Bridge Replacement	NY, NJ	Port Authority NY/NJ	DBM/F
\$1,000	I-95/395 HOT Lanes	VA	Virginia DOT	DBFOM
\$600	I-77 Hot Lanes	NC	North Carolina DOT	DBFOM
\$160	US-36 BRT	CO	CO HPTE	DBFOM

PARSONS

Summary

- New and Evolving Industry Direction
- Risks versus Value
- Looking to the Future.....

Questions?



For problem-solving **SOLUTIONS**
to the challenges of our time



Delivering the Future

www.parsons.com

PARSONS